

SYSTEM AND METHOD FOR TRANSMISSION OF VIDEO SIGNALS USING
MULTIPLE CHANNELS

ABSTRACT OF THE DISCLOSURE

5 In a communication network (20), a video encoder/decoder
system (114) and an encoding method (150) facilitate
transmission of video frames (116) over multiple low-data-rate
channels (46). Frame data (204) is generated for each video
frame (116). The frame data (204) is transformed (172) to
10 obtain transform coefficients (212), which are assembled (174)
into quadtrees (216) and separately coded (178). In addition,
motion vectors (166) are split into coding blocks (188) and
separately coded (190). The quadtrees (126) and the motion
vectors (166) are independently distributed among the multiple
15 channels (46) for transmission. A decoding method (360)
facilitates error resilient reception of transform coefficient
packets (222) and motion vector packets (244) so that lost
transform coefficients (374) and/or lost motion vectors (384)
can be estimated at a receiving video encoder/decoder system
20 (114) to reconstruct a received video frames 144.